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DALLAS, TX 75201				
EXAMINER				
LIU, JONATHAN				
ART UNIT		PAPER NUMBER		
3673				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/520,029

**Applicant(s)**

KEREKES ET AL.

**Examiner**

JONATHAN J. LIU

**Art Unit**

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

***In response to remarks filed 3/16/2009***

***Response to Arguments***

1. Applicant's arguments filed 3/16/2009 have been fully considered but they are not persuasive.

In regards to applicant's arguments of the newly added claim limitations, i.e. tubular pockets directly contacting each other *and* directly interconnected via seams, see below annotated figure 3 of Tufenkjian [in rejection].

With regards to applicant's arguments that tensioned shell does not form the "actual seat or backrest cushion" – as described in lines 5-10 of Tufenkjian, "...the body of the device will be expanded and thus form a pneumatic mattress..." Thus, the shell of Tufenkjian is *necessarily/inherently* tensioned when the plurality of pouches are filled with compressed air.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 9, and 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 1, the newly added claim limitations of "each one of the plurality of pouches is pressurized resulting in each one of the plurality of pouches being compressed relative to adjacent pouches and wherein outermost pouches are operable to be compressed against the shell causing... [emphasis added]" and "a top surface of the tensioned shell and not the plurality of tubular pockets forms an actual seat.... [emphasis added]" have no support in the originally filed disclosure, and thus constitute new matter. Appropriate correction is required.

Regarding claim 9, the newly added claim limitation of "a top surface of the tensioned shell and not the plurality of tubular pockets forms an actual seat.... [emphasis added]" has no support in the originally filed disclosure, and thus constitutes new matter. Appropriate correction is required.

Regarding newly added claim 10, the limitations of "wherein a width of the shell is smaller than a width of the plurality of tubular pockets when the plurality of pouches are pressurized...[emphasis added]" and "wherein , when the plurality of pouches are pressurized, each one of the plurality of pouches is compressed relative to other pouches causing the shell to be tensioned. [emphasis added]" have no support in the originally filed disclosure, and thus constitute new matter. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

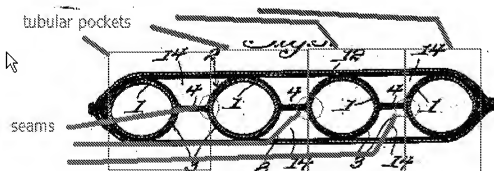
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tufenkjian (US 1,733,034) in view of Bradbury (US 4,826,249). Tufenkjian teaches a seat cushion comprising a plurality of low-elasticity tubular pockets (see annotated figure below: the tubular pockets comprise members [2, 4] *within* each of the annotated squares) arranged side by side such that adjacent sides of each tubular pocket are in direct contact along areas therebetween and are directly interconnected via seams (see below annotated figure 3; "seam" [from Webster's II Dictionary]: *the line formed by joining two pieces at the edges*); wherein each of the plurality of tubular pockets comprises a pouch (1) comprising an elastic plastic material with a valve (11); wherein the plurality of tubular pockets are enclosed by a shell (8, 12) made of a textile material of low elasticity; wherein dimensions of the shell in relation to each one of the plurality of pouches is such that when the plurality of pouches are filled with compressed air, each one of the plurality of pouches is pressurized resulting in each one of the plurality of pouches being compressed relative to adjacent pouches and wherein outermost pouches are operable to be compressed against the shell *necessarily* causing the shell to be tensioned (see figure 3); and wherein a top surface of the tensioned shell and not the plurality of tubular pockets forms an actual seat or backrest surface resulting in a better comfort and feel of the seat and backrest cushion (lines 5-10). With respect to the limitations of a "low-elasticity textile" [e.g. the pockets and the shell], it is within an ordinary level of skill in the art to vary the elasticity of the materials being used in inflatable devices – depending upon on expansion preferences (as set by manufacturer,

etc.), which ultimately affects the resilience of the cushion. Although Tufenkjian is silent to the exact elasticity of the pockets and shell, it would have been obvious to make the materials of a low elasticity in order to provide a "tight" and stable cushion. Furthermore, the pockets and covers (e.g. 2, 8, 12) of Tufenkjian are *capable of* being of "low elasticity."

Although Tufenkjian does not teach a seat cushion *and* a backrest cushion, Bradbury teaches to use the same cushion structure for a seat cushion and a backrest cushion (see figure 3). Tufenkjian and Bradbury are analogous because they are from the same field of endeavor, i.e. cushions. It would have been obvious to modify the invention of Tufenkjian to include a backrest member equivalent in structure to the seat cushion as disclosed (by Tufenkjian). The motivation would have been to provide adequate support for a user's back. Therefore, it would have been obvious to modify the invention to Tufenkjian as specified in claim 1.



With regards to claims 2 and 3, it is simply a matter of preference to design the seat/back cushions wherein the plurality of tubular pockets are either arranged parallel to a direction of the seat or across the seat cushion (as shown by Bradbury). It would have been an obvious matter of design since applicant has not disclosed that the pocket

orientation solves any stated problems or is for any particular purpose and it appears that the invention would perform equally well with either of the claimed pocket orientations. Furthermore, it is well within an ordinary level of skill within the art to orient the pockets of Tufenkjian as preferred.

In regards to claim 4, all of the plurality of tubular pockets in the seat cushion and the backrest cushion are of the same size (see figure 3 of Tufenkjian).

With regards to claim 5, the cross dimensions of the plurality of tubular pockets are selected such that optimum seating comfort can be achieved (i.e. by the pressure in each of pouches being inflated).

Regarding claim 6, the pockets of the seat and the backrest cushions can be filled individually with compressed air (inherently taught by Tufenkjian: col. 2, lines 72-73).

Claim 8 is considered a product-by-process claim. "[E]ven though product-by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." [citations omitted] See MPEP 2113. The limitation of "is sewn" is treated as a method of production and therefore is given little patentable weight. Accordingly, Tufenkjian teaches wherein at least one of said plurality of tubular pockets is *connected* to the shell along further seams - Tufenkjian teaches "seams" (at 9, 10) [see above explanation/definition of "seam"].

6. Claims 7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tufenkjian (US 1,733,034) in view of Bradbury (US 4,826,249) as applied to claim 2, in further view of Sekido et al. (US 4,965,899). Tufenkjian as modified, teaches the invention of claim 2. However, Tufenkjian as modified, does not teach to vary the cross dimensions of the pockets along their longitudinal dimensions. Sekido et al. teach an inflatable cushion comprising tubular elements that vary along their longitudinal dimension (see figure 7). Tufenkjian and Sekido et al. are analogous because they are from the same field of endeavor, i.e. cushions. It would have been obvious to one of ordinary skill in the art to modify the tubular elements of Tufenkjian to vary along their longitudinal length. The motivation would have been to provide a more contoured surface, thereby increasing comfort. Therefore, it would have been obvious to modify the invention to Tufenkjian as specified in claim 7.

In regards to claim 9, Tufenkjian as modified (see above discussions with respect to claims 1 and 7), teaches an adaptive pneumatic seat cushion and backrest cushion for vehicles and aeroplanes, each of the seat cushion and the backrest cushion (as modified by Bradbury) comprising: a plurality of low-elasticity textile tubular pockets (Tufenkjian: 2, 4 – see annotated figure 3 above), each tubular pocket having an elongated axis defined by a length of the tubular pocket, the tubular pockets arranged side by side such that adjacent sides of each tubular pocket are in direct contact along areas therebetween (Tufenkjian: see annotated figure 3 above) and are directly interconnected via seams (Tufenkjian: see annotated figure 3 above); wherein a height of each tubular pocket varies along the length of the axis such that a minimum height is



located near an approximate midpoint of the axis (as modified by Sekido: see figure 7); wherein each of the plurality of tubular pockets comprises a pouch (Tufenkjian: 1) comprising an elastic plastic material with a valve (Tufenkjian: 11); wherein the plurality of tubular pockets are enclosed by a shell made of a textile material of low elasticity (Tufenkjian: 8, 12); and wherein, when the plurality of pouches are filled with compressed air, each one of the plurality of pouches is pressurized resulting in the shell *necessarily* being tensioned (Tufenkjian: see figure 3); and wherein a top surface of the tensioned shell and not the plurality of tubular pockets forms an actual seat or backrest surface (lines 5-10) resulting in a better comfort and feel of the seat and backrest cushion.

Regarding claim 10, Tufenkjian as modified, teaches an adaptive pneumatic seat cushion and backrest cushion (as modified by Bradbury) for vehicles and aeroplanes, each of the seat cushion and the backrest cushion comprising: a plurality of low-elasticity textile tubular pockets (see annotated figure 3 of Tufenkjian above) arranged sided by side such that adjacent sides of each tubular pocket are in direct contact along areas therebetween and are directly interconnected via seams (see annotated figure 3 of Tufenkjian above); wherein each of the plurality of tubular pockets comprises a pouch (Tufenkjian: 1) comprising an elastic plastic material with a valve (Tufenkjian: 11); wherein the plurality of tubular pockets are enclosed by a shell (Tufenkjian: 8, 12) made of a textile material of low elasticity; wherein a width of the shell is smaller than a width of the plurality of pockets when the plurality of pouches are pressurized (Sekido: see figure 7); and wherein, when the plurality of pouches are pressurized, each one of the

plurality of pouches is compressed relative to other pouches *necessarily* causing the shell to be tensioned.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONATHAN J. LIU whose telephone number is (571)272-8227. The examiner can normally be reached on Monday through Friday, 8 am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on (571) 272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Peter Cuomo  
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